

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. [canceled]
2. [canceled]
3. [previously presented] A femoral hip implant for a femoral canal, the femoral canal having a canal wall with anterior, posterior, medial, and lateral aspects and a longitudinal axis along the femoral canal from a proximal position near the hip joint to a distal position nearer the knee joint, the femoral hip implant comprising:
 - a stem having a proximal end, a distal end, and a longitudinal axis extending therebetween, the stem having a polished and tapered exterior surface that permits the implant to subside distally ~~along the~~ into a cured cement mantel under load;
 - ~~a cured cement mantel surrounding a portion of the stem within the femoral canal;~~
 - a positioner, the positioner being removably engageable with the stem, the positioner including means for preventing the stem from rising proximally ~~out of the cement mantel and the femoral canal~~ beyond a predetermined position by abutment of the stem against the positioner while permitting distal subsidence of the stem ~~distally into the cured cement mantel along the~~; and means for anchoring the means for preventing relative to ~~the~~ a femoral canal; and
 - a head mounted on the stem, the head being engageable with a pelvic portion of the hip joint to provide articulating joint function, the means for preventing the stem from

rising being able to prevent the stem from rising while permitting the stem to subside during articulation of the joint in use by a patient.

4. [Canceled]

5. [currently amended] The femoral hip implant of claim 3 wherein the means for preventing comprises a first member engageable with a portion of the stem to prevent it from rising, the first member ~~extending~~ being positionable proximally over a portion of the stem relative to the direction of the ~~hip implant~~ longitudinal axis.

6. [currently amended] The femoral hip implant of claim 3 wherein the means for preventing comprises a first member engageable with a portion of the stem to prevent it from rising, the first member being ~~anchored~~ anchorable relative to the ~~cement mantle~~ femoral canal such that the stem is able to move distally relative to the first member but is prevented from moving proximally beyond a predetermined position by engagement with the first member.

7. [currently amended] The femoral hip implant of claim 3 wherein the positioner further comprises a body including first and second members extending at an angle from one another, the means for preventing including the first member and the means for anchoring including the second member, the first member being ~~positioned~~ positionable proximally over a portion of the stem while the second member is simultaneously positionable along the exterior surface of the stem between the stem and the canal wall, the second member being ~~anchored~~ anchorable in the a cement mantle between the stem and the canal wall.

8. [previously presented] The femoral hip implant of claim 7 further comprising means for spacing the stem a predetermined distance from the lateral aspect of the femoral canal.

9. [Currently Amended] The femoral hip implant of claim 8 wherein the means for spacing comprises a spacing member connected to the body a predetermined distance from the second member, the spacing member being ~~engaged~~ engageable with the stem and the second member being ~~engaged~~ engageable with the lateral aspect of the femoral canal to maintain a predetermined spacing between the stem and the lateral aspect of the femoral canal.

10. [previously presented] The femoral hip implant of claim 9 wherein the spacing member comprises a projection extending medially from the second member toward the stem.

11. [previously presented] A positioner for retaining a femoral hip implant in a femoral canal, the femoral canal having anterior, posterior, medial, and lateral aspects and a longitudinal axis along the femoral canal from a proximal position near the hip joint to a distal position nearer the knee joint, the femoral hip implant being surrounded at least in part by cement positioned between the femoral hip implant and the femoral canal, the femoral hip implant having a longitudinal axis that in use is approximately parallel to the femoral canal longitudinal axis, and a polished and tapered exterior surface that permits the implant to move relative to the cement and therefore to subside distally into the cement under load, the positioner comprising:

means for preventing the femoral hip implant from rising out of the femoral canal beyond a predetermined position while permitting subsidence of the femoral hip implant distally into the cement ;

means for anchoring the means for preventing relative to the femoral canal;

a body including first and second members extending at an angle from one another, the means for preventing including the first member and the means for anchoring

including the second member, the first member being positionable over a portion of the femoral hip implant, the second member being positionable in the cement to anchor the positioner relative to the femoral canal;

means for spacing the femoral hip implant a predetermined distance from the lateral aspect of the femoral canal, wherein the means for spacing comprises a spacing member connected to the body a predetermined distance from the second member, the spacing member engageable with the femoral hip implant and the second member engageable with the lateral aspect of the femoral canal to maintain a predetermined spacing between the femoral hip implant and the lateral aspect of the femoral canal, and

a projection extending distally from the first member to engage a recess formed in the femoral hip implant.

12. [previously presented] A positioner for retaining a femoral hip implant in a femoral canal, the femoral canal having anterior, posterior, medial, and lateral aspects and a longitudinal axis along the femoral canal from a proximal position near the hip joint to a distal position nearer the knee joint, the femoral hip implant being surrounded at least in part by cement positioned between the femoral hip implant and the femoral canal, the femoral hip implant having a longitudinal axis that in use is approximately parallel to the femoral canal longitudinal axis, and a polished and tapered exterior surface that permits the implant to move relative to the cement and therefore to subside distally into the cement under load, the positioner comprising:

means for preventing the femoral hip implant from rising out of the femoral canal beyond a predetermined position while permitting subsidence of the femoral hip implant distally into the cement ;

means for anchoring the means for preventing relative to the femoral canal;

a body including first and second members extending at an angle from one another, the means for preventing including the first member and the means for anchoring including the second member, the first member being positionable over a portion of the femoral hip implant, the second member being positionable in the cement to anchor the positioner relative to the femoral canal; and

third and fourth members extending from the body, the second, third, and fourth members being positionable in the cement adjacent the lateral, anterior, and posterior aspects of the femoral canal respectively.

13. [previously presented] The positioner of claim 12 wherein at least the third and fourth members are biased inwardly toward the femoral hip implant axis in use to releasably grip the femoral hip implant prior to insertion of the femoral hip implant into the cement.

14. [previously presented] The positioner of claim 12 wherein each of the second, third, and fourth members further comprises a projection extending inwardly toward the femoral hip implant axis in use, the projections being engageable with the exterior surface of the femoral hip implant to maintain a predetermined spacing between the members and the femoral hip implant.

15. [currently amended] A positioner for retaining a femoral hip implant in a femoral canal having a longitudinal axis and a canal wall extending from an upper position near the hip joint to

a lower position near the knee joint, and anterior, posterior, medial, and lateral aspects radially about the axis, the positioner comprising:

a first member positionable proximally ~~extending~~ over a portion of the femoral hip implant ~~such that it limits upward axial motion of the femoral hip implant and permits downward axial motion of the femoral hip implant;~~ and

a second member extending at an angle from the first member, the second member being securable relative to securing the positioner adjacent the femoral canal such that the positioner limits upward axial motion of the femoral hip implant while permitting downward axial motion of the femoral hip implant postoperatively during articulation of the joint.

16. [Canceled]

17. [currently amended] A positioner for retaining a femoral hip implant in a femoral canal having a longitudinal axis extending from an upper position near the hip joint to a lower position near the knee joint, and anterior, posterior, medial, and lateral aspects radially about the axis, the positioner comprising:

a first member positionable ~~extending~~ over a portion of the implant such that it limits upward axial motion of the femoral hip implant and permits downward axial motion of the femoral hip implant; and

a second member extending from the first member, the second member able to secure ~~securing~~ the positioner adjacent a ~~the~~ femoral canal; and

a third member projecting from one of the first and second members to engage the femoral hip implant to maintain the femoral hip implant at a predetermined radial

position within the femoral canal during insertion into the femoral canal but
permitting downward axial motion of the femoral hip implant after insertion.

18. [currently amended] A femoral hip system for implantation with bone cement in a hip joint
formed by a femur and a pelvis, the femur having a femoral canal, the system comprising:

a femoral hip implant having a stem insertable ~~for insertion~~ into a ~~the~~ femoral canal;

~~bone cement within the femoral canal surrounding the stem;~~ and

a positioner having an anchor member embeddable ~~embedded~~ in the bone cement to

secure ~~securing~~ the positioner in the femoral canal adjacent the hip implant, and a

retention member engageable with a portion of the femoral hip implant such that

it blocks upward motion of the implant out of the canal while permitting

downward motion of the implant into the canal during articulation of the joint.

19. [Canceled]

20. [Canceled]

21. [Canceled]

22. [currently amended] A positioner for positioning a femoral hip implant in a femoral canal, the
canal having a canal wall and a longitudinal axis extending from an upper position near the hip
joint to a lower position near the knee joint, and anterior, posterior, medial, and lateral aspects
radially about the axis, the femoral hip implant having a shoulder defining the top of the femoral
hip implant, the positioner comprising:

an "L"-shaped body having a first leg positionable over a portion of the femoral hip

implant relative to the longitudinal axis and a second leg simultaneously positionable

within the canal adjacent the canal wall between the femoral hip implant and the canal

wall to maintain a predetermined spacing between the femoral hip implant and the canal wall while permitting downward motion of the implant into the canal.

23. [Original]The positioner of claim 22 wherein the first leg is positionable over the shoulder of the femoral hip implant.

24. [currently amended]A method for positioning a femoral hip implant in a femoral canal, the method comprising:

~~providing a femoral hip implant configured to fit within a femoral canal;~~

inserting cement into the femoral canal;

inserting ~~a~~ the femoral hip implant into the cement in the femoral canal;

inserting an implant positioner adjacent to the femoral hip implant with ~~the implant~~

~~positioner including~~ an anchor member placed into the cement such that the

anchor member becomes firmly attached to the cement upon hardening of the

cement and with a retention member positioned above ~~over~~ a portion of the

implant such that upward motion of the femoral hip implant beyond a

predetermined position is limited by abutment of the portion against the retention

member while downward subsidence of the femoral hip implant is unimpeded by

the positioner during articulation of the hip joint in normal use by a patient ~~such~~

~~that the anchor member becomes firmly attached to the cement upon hardening of~~

~~the cement and the retention member permits the femoral hip implant to subside~~

~~down into the cement but prevents the femoral hip implant from rising up out of~~

~~the cement beyond a predetermined position by abutment of the implant against~~

~~the retention member.~~

25. [previously presented] The femoral hip system of claim 18 wherein the positioner comprises a unitary, "T"-shaped body with legs projecting downwardly from the ends of the "T", the T"-shaped body defining the retention member and the downwardly projecting legs defining the anchor member.

26.[previously presented] The femoral hip system of claim 25 wherein the positioner further comprises a boss projecting downwardly from the "T"-shaped body, the boss being engageable with the stem to space the stem radially a predetermined distance from the legs.

27. (new) The positioner of claim 15 wherein the first and second members are angled such that the first member is positionable proximally over a portion of the femoral hip implant while the second member is simultaneously positionable along an exterior surface of the femoral hip implant between the femoral hip implant and the canal wall such that the second member is embeddable in bone cement placed in the canal.

28. (new) The positioner of claim 27 wherein the first member is positionable above the femoral hip implant while the second member extends around the exterior of the implant to engage a cement mantle surrounding the femoral hip stem.

29. (new) The positioner of claim 28 wherein the first member comprises a top and the second member comprises a first leg that curves downwardly from the top approximately 90 degrees, the positioner further including a second leg extending from the top and curving downwardly approximately 90 degrees, and a third leg extending from the top and curving downwardly approximately 90 degrees such that the first, second, and third legs are positionable along first, second , and third sides of the femoral hip implant.

30. (new) The positioner of claim 29 further comprising a boss projecting downwardly from the first member, the legs each curving downwardly approximately parallel to the boss and surrounding the boss.

31. (new) The positioner of claim 30 wherein each leg further comprises a tab extending inwardly toward the boss.

32. (new) The positioner of claim 17 wherein the third member comprises a boss extending downwardly from the first member.

33. (new) The positioner of claim 17 wherein the third member comprises a tab extending inwardly from the second member.

34. (new) The positioner of claim 22 wherein the second leg is engageable with the lateral aspect of the femoral canal to maintain a predetermined spacing between the stem and the lateral aspect of the femoral canal.

35. (new) The method of claim 24 wherein the positioner further comprises a boss extending downwardly from the retention member and inserting the positioner further comprises engaging the boss with the femoral hip implant to space the femoral hip implant a predetermined distance from the anchor member.

36. (new) The method of claim 24 wherein the positioner further comprises a tab extending inwardly toward the femoral hip implant from the anchor member and inserting the positioner further comprises engaging the tab with the femoral hip implant to space the femoral hip implant a predetermined distance from the anchor member.

37. (new) The method of claim 24 wherein the anchor member comprises first, second, and third legs extending downwardly from the retention member and inserting the positioner further

comprises placing the first, second, and third legs in the cement adjacent anterior, lateral, and posterior sides of the femoral hip implant.